

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listing of claims in the application:

LISTING OF CLAIMS:

Claims 1 - 6 (cancelled).

1 7. (new) A stereoflexographic process, wherein a
2 liquid or solid photopolymer plate is cured through the
3 bottom face only with two different and simultaneous levels
4 of radiation,
5 a lower level, suitable to catalyze the relief base
6 generation, replacing back exposure by percentile of gray
7 (halftone); and
8 a maximum level, suitable to catalyze the printing
9 relief generation, replacing main exposure, creating the
10 high relief third dimension, which is necessary for those
11 photopolymer plates destined for the flexographic and stamp
12 sectors by applying an analogical exposure equipment, based
13 on photoliths, negative films and lamps or processing
14 digitally in emission devices, modulating the radiation in
15 optic semiconductors, replacing photoliths and negative

16 films by LCD (Liquid Crystal Diode) or DMD (Digital Mirror
17 Device).

1 8. (new) Process according to claim 7, characterized
2 by speeding up the process and reducing production time for
3 prosecuting only by the bottom face of the photopolymer
4 plate.

1 9. (new) Process according to claim 7, characterized
2 by eliminating the dot gain usually occurring in
3 flexographic plates, which is caused by the effects of the
4 refraction and persistence of radiation inside the
5 photopolymer, thickening the top of the dot when the
6 expositions to radiation is done by the upper face (main
7 exposure) and by the bottom face (back exposure), thereby
8 damaging the resolution in said plates, by applying the
9 emission, only, on the bottom face, the effects of
10 refraction and persistence of radiation are inverted,
11 sharpening the top of the dot, and consequently improving
12 resolution in said plates.

1 10. (new) Process according to claim 7, characterized
2 by eliminating the dot droop usually occurring in
3 flexographic plates, which is caused by the effects of the

4 refraction and persistence of radiation inside the
5 photopolymer, sharpening the base of the dot and thickening
6 the top of the dot, when the expositions to radiation is
7 done by the upper face (main exposure) and by the bottom
8 face (back exposure), thereby weakening plate structure and
9 reducing the durability of these plates, by applying the
10 emission, only, on the bottom face, the effects of
11 refraction and persistence of radiation are inverted,
12 thickening the base of the dot and sharpening the top of the
13 dot, thereby reinforcing plate structure and increasing the
14 durability of these plates.

1 11. (new) Process according to claim 7, wherein
2 stereoflexography solves problems as neatness which is
3 caused by processing by both the upper face (main exposure)
4 and the bottom face (back exposure), it will allow the
5 development of new light and compact pieces of equipment to
6 manufacture photopolymer plates in the stamp sector,
7 characterized by the use of a fixed device which process
8 digitally, modulating the radiation in optic semiconductors,
9 type LCD (Liquid Crystal Diode) or DMD (Digital Mirror
10 Device), necessary to catalyze the photopolymer plate,
11 thereby transferring text and image files, to generate of
12 the printing relief, simultaneously, with the percentile of

13 gray (halftone) to generate the relief base, directly from
14 the computer, discarding, in these two improvements, the use
15 of negative films and their supplies.

1 12. (new) Process according to claim 7, wherein the
2 elimination of dot gain and dot droop provided by
3 stereoflexography will guarantee great neatness and longer
4 lifetime to the flexographic plates processed in the new
5 equipment, which is characterized by a mobile device, in
6 shaft X and shaft Y, parallel to the photopolymer plate,
7 processing digitally, modulating the radiation in optic
8 semiconductors, type LCD (Liquid Crystal Diode) or DMD
9 (Digital Mirror Device), necessary to catalyze the
10 photopolymer plate, thereby transferring screen
11 printing(CMYK system) of the texts and images files, to
12 generate of the printing relief, simultaneously, with the
13 percentile of gray (halftone) to generate the relief base,
14 directly from the computer, discarding, in these two
15 improvements, the use of photoliths and negative films.